



BROAD EXAMINATIONS®

P.6 MATHEMATICS EXAMINATION

MID - TERM III 2024

Time allowed: 2 hours 30 minutes

Pupil's Name:

School Name:

District Name:

Read the following instructions carefully:

1. This paper is made up of two sections: A and B.
2. Section A has 20 questions (40 Marks)
3. Section B has 12 questions (60 Marks)
4. Answer **ALL** questions in both sections A and B.
5. All answers must be written in the space provided in blue or black ball point pens and ink. **Only diagrams should be done in pencil.**
6. Unnecessary crossing of answers will lead to loss of marks.
7. Any handwriting, which cannot be easily read, may lead to loss of marks.
8. Do **not** fill anything in the boxes indicated for Examiners' use only.

FOR EXAMINERS' USE ONLY

PAGES	MARKS	SIGN
Page 2		
Page 3		
Page 4		
Page 5		
Page 6		
Page 7		
Page 8		
TOTAL		

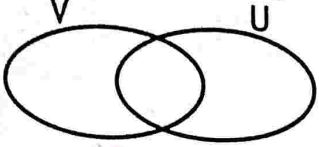
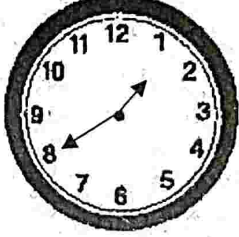
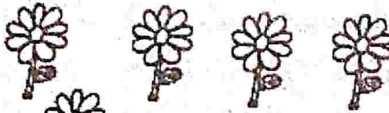

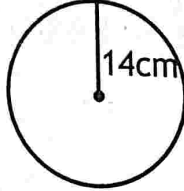
Teacher's comment to the learner

.....
.....
.....
.....

Approved by:

Team Head Mathematics Department

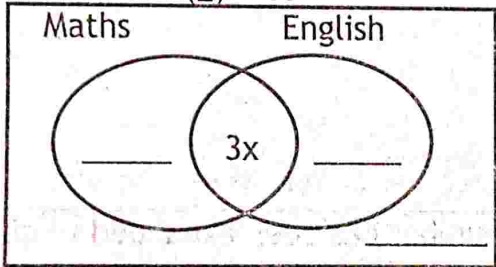
SECTION .A. (40 MARKS)

1.	Work out; $24 \div 4$	2.	Find the place value of the underlined digit in the number 73 <u>6</u> 25.
3.	<p>Given that set $V = \{1, 2, 3, 6\}$ and set $U = \{2, 4, 6\}$, show the above sets on the venn diagram below.</p> 	4.	Work out; $1\frac{1}{2} + \frac{2}{3}$
5.	List all factors of 30.	6.	<p>What afternoon time is shown on the clock face below?</p> 
7.	<p>The pictures below show the flowers in a P.6 class flower garden.</p>  <p>If  represents 15 flowers, how many flowers are in the garden?</p>	8.	<p>Calculate the circumference of the circle below. ($\pi = \frac{22}{7}$)</p> 

9.	Joanilah had some money. Her mother gave her more sh. 3500 and she got sh. 10,000 altogether. How much money did she have at first?	10.	Increase 480 kg in the ratio 5 : 4.
11.	Draw an angle of 120° using a protractor.	12.	Express 10 35 hours to 12 hour clock system.
13.	Given that 1 pound sterling (£) costs Ugsh.4600, how many Pound Sterling can one obtain from Ugsh.2318400?	14.	There will be a parents' meeting at school next week. What is the probability that the meeting will be held on a day beginning with letter T?
15.	Find the least number of books that can be shared by either 12 boys or 15 boys leaving a remainder of 5 books.	16.	What number has been expanded to give; $(3 \times 10^4) + (2 \times 10^3) + (5 \times 10^1) + (4 \times 10^0)$?

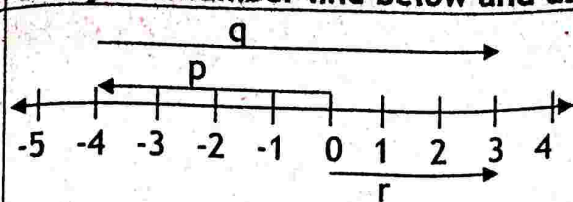
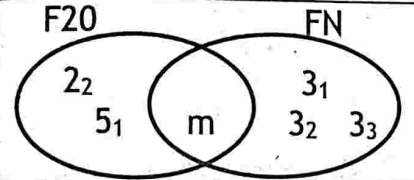
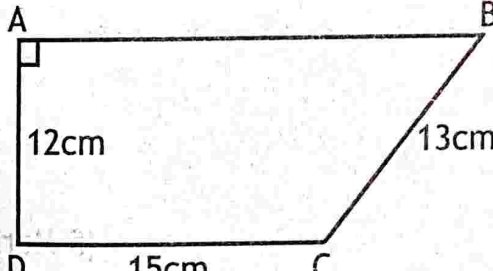
17.	Briton borrowed sh. 150,000 from the association that charges interest at 5% per month. If he paid back sh. 195,000 at the end of 5 months, how much interest did he pay?	18.	In a line of pupils, Beatrice was the 18th from one side and 16th from the other side. How many pupils are in the line?
19.	Express 20 as a product of its prime factors.	20.	Find the total distance around a cube of side 5cm.

SECTION .B. (60 MARKS)

SECTION .D. (60 MARKS)			
21.	In a class of 63 pupils, $(5x - 1)$ pupils like Maths only, $(12+x)$ pupils like English only, $3x$ like both subjects while 16 pupils like other subjects.		
(a)	Represent the above information on the venn diagram below. $n(\Sigma) = 63$ 	(b)	Find the value of x .
(c)	How many pupils like English?		

(05 Marks)

(05 Marks)

<p>22. Study the number line below and use it to answer the questions about it.</p> 	<p>(a) Write the integer represented by arrows;</p> <p>(i) p _____</p> <p>(ii) q _____</p> <p>(iii) r _____</p>
<p>(b) Write the mathematical sentence shown on the number line above.</p> <p style="text-align: right;">(5 Marks)</p>	
<p>23. (a) Work out; $\frac{1}{3} - \frac{1}{4} + \left(\frac{2}{5} \text{ of } \frac{1}{4}\right)$</p>	<p>(b) Simplify; $\frac{0.42 \times 0.035}{0.7 + 0.5}$</p> <p style="text-align: right;">(5 Marks)</p>
<p>24. The venn diagram below shows F₂₀ and F_N. Use it to answer questions about it.</p> 	<p>(a) Find the value of m.</p> <p>(b) Find the value of N.</p> <p>(c) Calculate the LCM of 20 and N.</p> <p style="text-align: right;">(4 Marks)</p>
<p>25. Study the figure below and use it to answer questions about it.</p> 	<p>(a) Find the length AB.</p>

(b)	Calculate the area of the figure.	(c)	Work out the distance around the figure.
26.	(a) A lorry carries 1400 bricks per trip. How many trips does it make to carry 11,200 bricks?	(b)	How much money is needed to buy 5 lorries of bricks if each brick costs sh. 200?
27.	(a) Using a ruler, a pencil and a pair of compasses only, construct a rectangle KLMN where line $KL = 8\text{cm}$, $LM = 5\text{cm}$.		
	(b) Join K to M and measure angle MKL.		

(6 Marks)

(04 marks)



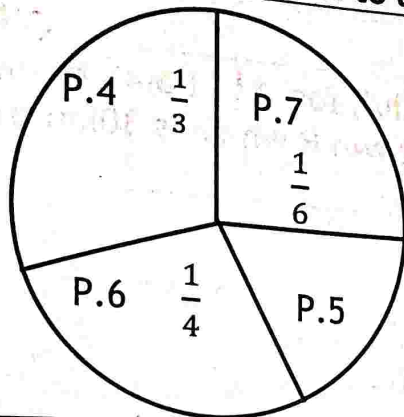
(5-Marks)

28. (a) If $a = 3$ and $b = 4$, find the value of $ab + a$.

(b) Solve for k ; $2k - 4 = 10$.

(5 Marks)

29. The pie-chart below shows the number of desks in P.7, P.6, P.5 and P.4 in a certain school. Study and use it to answer questions about it.



(a) What fraction represents desks in P.5 class?

(b) If there are 72 desks in all the four classes, find the number of desks in P.7 class.

(c) Express the number of desks in P.4 to degrees.

(5 Marks)

30. There are 10% more girls than boys in a class.

(a) Find the percentage of boys.

(b) If there are 40 pupils in the class, how many girls are in the class?

(5 Marks)

31. A parent banked school fees as shown below.

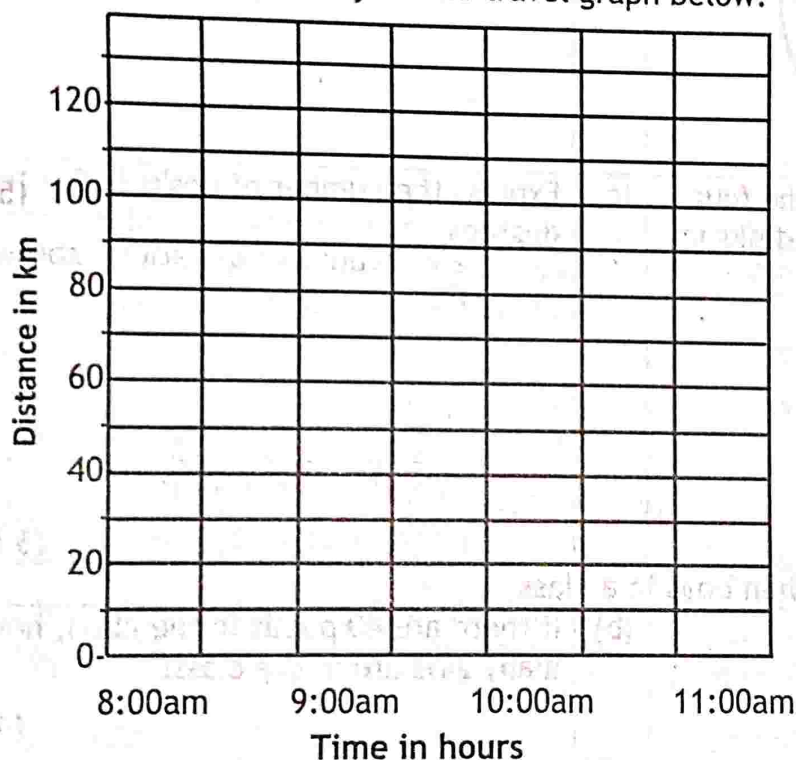
(a) Complete the table below correctly.

Denomination	No. of notes	Amount
Fifty thousand shilling notes	2	Sh. _____
Twenty thousand shilling notes	_____	Sh. 20,000
_____ thousand shilling notes	4	Sh. 40,000
Five thousand shilling notes	8	Sh. _____

(b) How much money did the parent bank?

32. A motorist left town P at 8:00am and travelled at 60km/h for $1\frac{1}{2}$ hours to town Q. He rested for 30 minutes at town Q and continued to town R which is 30km from Q in 1 hour. (5 Marks)

(a) Show the motorist's journey on the travel graph below.



(b) Calculate the motorist's average speed for the whole journey.

(06 marks)

END